

WHAT IS CLAIMED IS:

- 1 1. A wireless storage network, comprising:
2 a first wireless storage node;
3 a network node; and
4 a plurality of wireless channels coupling the first wireless storage node and the
5 network node, an assignment of the plurality of the wireless channels of the first wireless
6 storage node being based upon loading.
- 1 2. The wireless storage network of claim 1, wherein the network node
2 comprises a second wireless node.
- 1 3. The wireless storage network of claim 1, wherein the loading comprises
2 system loading.
- 1 4. The wireless storage network of claim 1, wherein the loading comprises
2 loading of the first wireless storage node.
- 1 5. The wireless storage network of claim 1, wherein the first wireless storage
2 node is assigned a first number of the wireless channels to provide a first bandwidth.
- 1 6. The wireless storage network of claim 5, wherein, upon a load change, the
2 first wireless storage node is assigned a second number of the wireless channels to
3 provide a second bandwidth.

1 7. A method for providing wireless storage, comprising:
2 assigning a first set of wireless channels to a first wireless storage node;
3 assigning a second set of wireless channels to a wireless network node;
4 monitoring a loading between the wireless network node and at least the first
5 wireless storage node; and
6 modifying the assignment of wireless channels when the loading between the
7 wireless network node and at least the first wireless storage node changes.

1 8. The method of claim 1, wherein the monitoring a loading comprises
2 monitoring a system loading.

1 9. The method of claim 1, wherein the monitoring a loading comprises
2 monitoring loading of the first wireless storage node.

1 10. The method of claim 1, wherein the modifying the assignment of wireless
2 channels comprises assigning additional wireless channels to the first wireless storage
3 node when a larger bandwidth is needed.

1 11. The method of claim 1, wherein the modifying the assignment of wireless
2 channels comprises reducing the number of wireless channels to the first wireless storage
3 node when the wireless network node needs more bandwidth to communicate with a
4 second wireless storage node.

1 12. The method of claim 1, wherein the assigning a second set of wireless
2 channels to a wireless network node further comprises assigning a second set of wireless
3 channels to a wireless storage node.

1 13. A wireless storage network, comprising:
2 a plurality of wireless storage devices having at least one wireless interface each;
3 and
4 a plurality of wireless channels, the wireless channels being assigned to the
5 wireless interfaces of the plurality of wireless storage devices;
6 wherein the load to the plurality of wireless storage devices is balanced by
7 adjusting assignments of the plurality of wireless channels to the plurality of wireless
8 storage devices.

1 14. The wireless storage network of claim 13 further comprising at least one
2 wireless network device for controlling the assignment of wireless storage devices.

1 15. The wireless storage network of claim 13, wherein the loading comprises
2 system loading.

1 16. The wireless storage network of claim 13, wherein the loading comprises
2 loading of a wireless storage device.

1 17. The wireless storage network of claim 13, wherein a first wireless storage
2 node is assigned a first number of the wireless channels to provide a first bandwidth.

1 18. The wireless storage network of claim 17, wherein, upon a load change,
2 the first wireless storage node is assigned a second number of the wireless channels to
3 provide a second bandwidth.

1 19. A program storage device readable by a computer tangibly embodying one
2 or more programs of instructions executable by the computer to perform a method for
3 providing wireless storage, the method comprising:

4 assigning a first set of wireless channels to a first wireless storage node;

5 assigning a second set of wireless channels to a wireless network node;

6 monitoring a loading between the wireless network node and at least the first
7 wireless storage node; and

8 modifying the assignment of wireless channels when the loading between the
9 wireless network node and at least the first wireless storage node changes.

1 20. The program storage device of claim 19, wherein the monitoring a loading
2 comprises monitoring a system loading.

1 21. The program storage device of claim 19, wherein the monitoring a loading
2 comprises monitoring loading of the first wireless storage node.

1 22. The program storage device of claim 19, wherein the modifying the
2 assignment of wireless channels comprises assigning additional wireless channels to the
3 first wireless storage node when a larger bandwidth is needed.

1 23. The program storage device of claim 19, wherein the modifying the
2 assignment of wireless channels comprises reducing the number of wireless channels to
3 the first wireless storage node when the wireless network node needs more bandwidth to
4 communicate with a second wireless storage node.

1 24. The program storage device of claim 19, wherein the assigning a second
2 set of wireless channels to a wireless network node further comprises assigning a second
3 set of wireless channels to a wireless storage node.